Amendments To The Specification:

Please amend the paragraph beginning at page 3, line 1 to read as follows:

Fig. 1 shows a barrier movement operator 11 for controlling a motor 13 and thereby move a barrier (not shown). Barrier movement operators which control the position of a barrier are well known and not described in detail herein. The barrier movement operator 11 comprises a barrier movement controller 15 which responds to operational input signals and user generated input signals to control motor 13. A power supply 17 received mains voltage at 110 V AC 60 HZ at input terminals 19 and converts a portion of the received voltage to DC. The barrier movement controller 15 is connected to receive DC voltage from power supply 17 via a conduction path 21 and is connected to power supply 17 via a communication path ~~29~~ 22 so that the power supply can be monitored and controlled as needed.

Please amend the paragraph beginning at page 3, line 3 to read as follows:

When mains voltage is present at input terminals 19 a DC voltage is applied by power supply 17 between a conductor 23 and a conductor 25. In the present embodiment the voltage ~~or~~ on conductor 23 is positive with respect to conductor 25 by approximately 28V. It will be apparent that other voltage levels and polarities will also provide operational systems. The DC voltage between conductors 23 and 25 may be filtered or it may be an unfiltered full wave rectified sine wave or some DC representation inbetween.

Please amend the paragraph beginning at page 4, line 9 to read as follows:

Plug 32 consists of mating portions 32a and 32b. Portion 32a remains with the barrier movement operator 11 and is configured to receive plug 32b from battery backup unit 39. Plug 32 connects conductor 31 to conductor 33 and also connects conductor 25 to conductor 35. Thus, when mains voltage is present at input 19 a DC voltage will be present between conductors 33 and 35 from power supply 17. Battery backup 39 includes a nominally 24 volt battery 37

which is charged and maintained in a charged state by a battery charge and control circuit 41 and conductors 47 and 49. Conductor 47 is connected to the positive terminal of battery 37 via a cut out circuit 45 which, for purposes of the present description, can be considered to be a continuous conductor from conductor 47 to battery 37. The details of cut out circuit 45 and its functions are discussed later herein with regard to Fig. 2. Also included in battery backup 39 is a diode 43 providing unidirectional isolation between the positive terminal of battery 37 and conductor 33. Diode 43 permits current flow from battery 37 toward conductor 33 and opposes such flow in the reverse direction.

Please amend the paragraph beginning at page 5, line 3 to read as follows:

Fig. 2 is a schematic diagram of the battery charger and control ~~39~~ 41 and includes the cut out circuit 45 and bypass diode 43. The battery 37, which is the present embodiment is a rechargeable 24V battery, is connected with its positive terminal to conductor 46 and its negative terminal to conductor 49. Control is exercised over battery charger and control 41 by a programmed microprocessor which may, for example, be a microchip PIC16F72 running at 4M HZ. Details of the oscillator circuit 53 to achieve this rate of operation are well known. Microprocessor 51 receives sensed voltage and current levels within the battery charger and control 41 and based on the sensed readings, performs functions to maintain proper operation.

Please amend the paragraph beginning at page 6, line 22 to read as follows:

Battery charger 63 includes a series connected power FET 79 the conduction state of which is controlled by microprocessor 51 via a conductor 80 and driver transistor 81. The FET 79 is controlled in the pulse width modulation (PWM) mode. Control pulses are sent from microprocessor at a predetermined rate e.g., 1KHZ and the width of the control pulses is increased or decreased depending on the charging needs of battery 37. Cut out circuit 45 comprises a relay 83 which is controlled by microprocessor 51 to connect or disconnect battery 37 from the battery charging and control circuit 41. In the described embodiment, relay 83 comprises two coils 84 and 85 which are selectively enabled by microprocessor 51 to connect or disconnect the battery. The relay 83 shown must be actively pulsed to switch from one state to

the other so that, should power be lost the relay will remain in the last state it was commanded to be in. The battery 37 is connected by relay 83 in response to a pulse on conductor 87 via transistor 88 and it is disconnected by a pulse on conductor 89 via a transistor 90. A user is advised as to the state of charging and control circuit ~~39~~ 41 by three separately controlled LEDs 91, 92 and 93 which display the colors red, green and yellow respectively and by an audible signaling device 95 which in the present example is a buzzer.

Please amend the paragraph beginning at page 7, lines 4-9 to read as follows:

When plug 32b (Fig. 1) is plugged into plug 32a and power is being provided between conductor 33 and 35 from power supply 17, the battery charge and control circuit 41 will enter, or remain in, the battery charge mode. In the battery charge mode, the battery voltage and battery charging current are sensed and a selected PWM signal is sent to FET 79 to properly charge the battery 37. While the battery is being charged the green LED 92 is flashed. When the sensed battery voltage achieves a predetermined level, ~~microcontroller~~ microprocessor 51 reduces the PWM signal to a maintenance amount and green LED 92 is controlled to provide an apparently continuous on light. As is apparent, the relay 83 is in the closed state during battery charging and maintenance. Should the microprocessor 51 detect a faulty battery by excessive charging current or battery voltage above a predetermined threshold, the battery will be removed from the circuit by controlling cut out 45 to open circuit.

Please amend the paragraph beginning at page 8, line 8 to read as follows:

When mains power remains off and the barrier movement operator 11 is moving the barrier, the increase in battery current will be sensed and buzzer 95 will be turned on to audibly advise the user that battery power is controlling present operation. Alternatively, the buzzer may be intermittently enabled during the entire time that the system is under battery power, but such is often determined to be a nuisance. While running on battery power the battery voltage is compared to a Voltage Dropping threshold and should battery voltage drop below it, the yellow LED 93 will be flashed and optionally the buzzer 95 will be enabled. Lastly, should battery voltage diminish to a Low Battery threshold, cut out 45 will be opened to protect the batteries from over

discharge. The resumption of mains power will automatically restore the described arrangement to the charging state.